A STUDY OF TEACHER EFFECTIVCENESS, OCCUPATIONAL STRESS IN RELATION TO TOTAL QUALITY MANAGEMENT

A
SYNOPSIS
SUBMITTED TO
DAYALBAGH EDUCATIONAL INSTITUTE
(DEEMED UNIVERSITY)
For the partial fulfillment of the
Requirement for the Degree of
DOCTOR OF PHILOSOPHY
IN
EDUCATION
[2012]

Supervisor

Dr. Lajwanti
Associate Professor

Prof. Vibha Nigam
Head
Deptt. of Pedagogical Sciences

Researcher

Vimal Kumar

Prof. Anand Pyari
Dean
Deptt. of Foundation

FACULTY OF EDUCATION
DAYALBAGH EDUCATIONAL INSTITUTE
(DEEMED UNIVERSITY), DAYALBAGH, AGRA

A STUDY OF TEACHER EFFECTIVCENESS, OCCUPATIONAL STRESS IN RELATION TO TOTAL QUALITY MANAGEMENT

1. INTRODUCTION

Rapid change, global competition and smarter customers have driven organizations to strive for excellence in all areas of organizational operations. Indeed one of the most important development of recent years is the renewed attention to the concept of "quality"; quality underwent many changes from quality to quality control to quality assurance and today it stands as Total Quality Management.

There are various well known definitions of quality. Crosby (1979) defines quality as "conformance to requirements" while Juran and Gryna (1980) define quality as "fitness for use". Deming (1986) defines as "A predictable degree of uniformity and dependability at low cost and suited to the market". It is more toward quality in operation. Many organizations found that the old definition of quality "The degree of confidence to a standard", was too narrow. Consequently they used a new definition of quality in terms of "customer focus".

In the context of higher education due to intangible nature of its processes, there is a considerable discussion on the notions of educational quality (Green 2004 and Harvey2005). Fincher (2004) describes how to quality perspectives have evolved in education over the years by going through a shift from experience to technique, style and finally to process. Quality has a variety of meanings and its range of meanings does cause

confusion, as each individuals perception of quality differs (shields 1999).

There are a number of researchers who have formulated frameworks for quality improvements (Johnson 1993; Susan 1995). These frameworks are entitled has Continuous Quality Improvement (CI), Strategic Quality Management (SQM) or Total Quality Management (TQM). There may be some differences among these approaches, the term TQM has considered to be more general to capture the essence of quality improvements.

Education is the ability to meet life's situation , it is character building process, enhancing ones personality and making him/her rational, capable responsive and intelligent. Twenty first century is characterized by the emergence of multiculturalism due to industrialization, urbanization, globalization and desecration in the family system. It is described as the century of stress and strain. Since, education is view as an instrument to develop the cognitive qualities, tolerance and interesting of people, it should prepare the younger generation to understand and face the realities of globalization. In this context, the schools and the teachers have more responsibilities in molding the character of the student. Thus, the role of the teacher in the society is vital for its improvement.

Professional demands teacher to be innovative in their attitude, flexible in their approach, always refreshing themselves with day to day developments in their respective subject area. At the same time, they should be. Capable of recognizing they value of human potentials,

understanding the diverse needs of learners and enrich the environment for their growth. In essence, the dream of learning society in this information age becomes real only when the teachers are able collaborate with each other to accomplished the task, and, towards this end their ability to communicate effectively becomes more critical than their technical skills and capabilities .

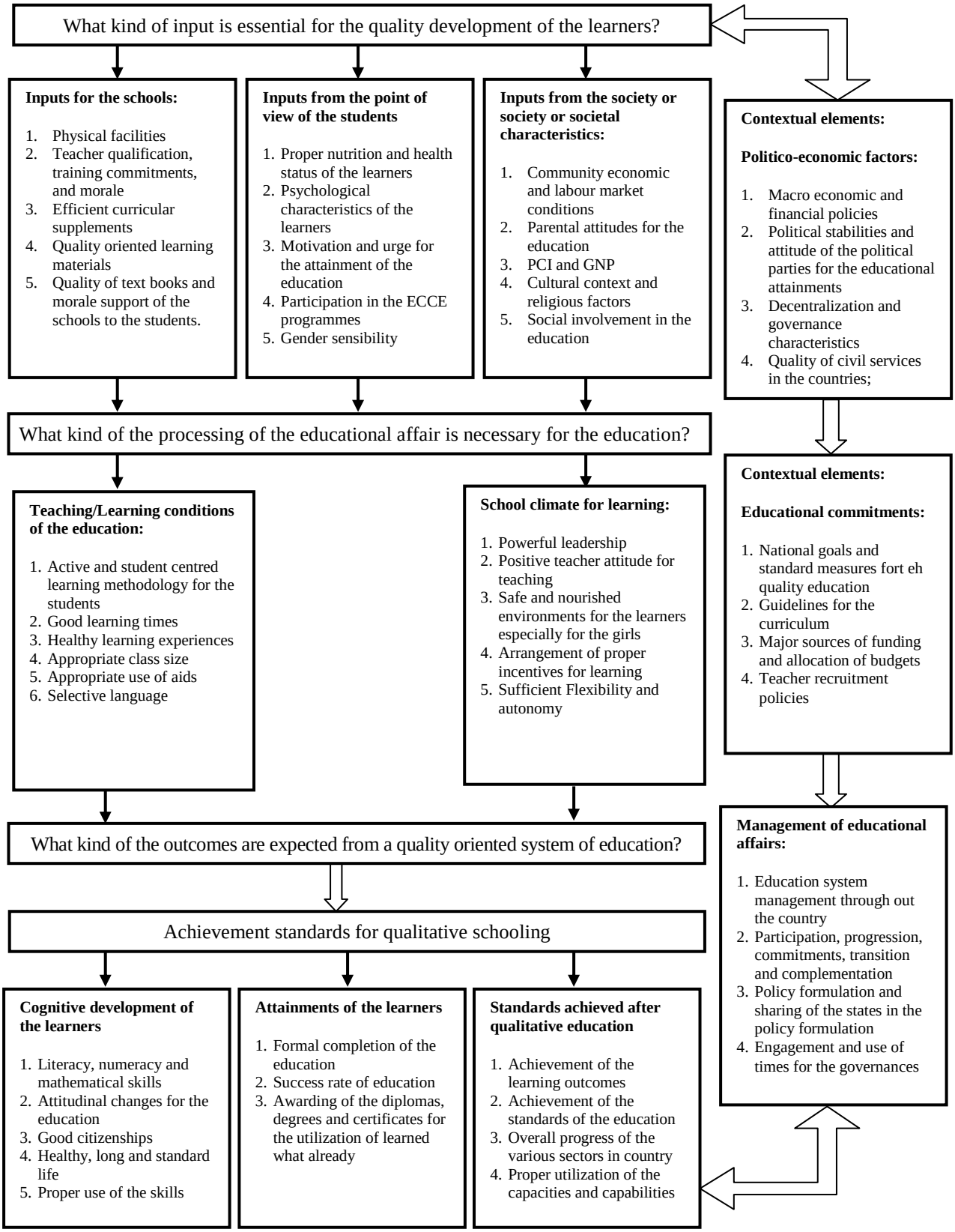
Quality assurance in teacher education plays the central role in the total quality management mission of the system. Quality assurance can be ensured by its application in all parts of customers. The main focus is on primary customers i.e. learners. Similarly equal attention need to be paid on the total education system and slight deviation in any part of sub-system will disturb the way of quality assurance.

A high quality teacher must possess these qualities to be more effective

- Commitment
- Competence
- Confidence

One framework has derived from Heneveld and Graig (1995), OECD/INES (2001), Scheerens (2002) to define quality that can help is shown figure 1. In this Input-Process-Output framework, the various stakeholders in education (Learners, Parents, Teachers, Communities and Government) and the various levels (Classroom, School, National policy) find their places. The framework can guide a step by step assessment of educational quality.

Figure : 1 *Frame work for defining Quality in the system of Education*


What kind of input is essential for the quality development of the learners?
Inputs for the schools:
1. Physical facilities
2. Teacher qualification, training commitments, and morale
3. Efficient curricular supplements
4. Quality oriented learning materials
5. Quality of text books and morale support of the schools to the students.
Inputs from the point of view of the students
1. Proper nutrition and health status of the learners
2. Psychological characteristics of the learners
3. Motivation and urge for the attainment of the education
4. Participation in the ECCE programmes
5. Gender sensibility
Inputs from the society or society or societal characteristics:
1. Community economic and labour market conditions
2. Parental attitudes for the education
3. PCI and GNP
4. Cultural context and religious factors
5. Social involvement in the education
Contextual elements:
Politico-economic factors:
1. Macro economic and financial policies
2. Political stabilities and attitude of the political parties for the educational attainments
3. Decentralization and governance characteristics
4. Quality of civil services in the countries;
What kind of the processing of the educational affair is necessary for the education?
Teaching/Learning conditions of the education:
1. Active and student centred learning methodology for the students
2. Good learning times
3. Healthy learning experiences
4. Appropriate class size
5. Appropriate use of aids
6. Selective language
School climate for learning:
1. Powerful leadership
2. Positive teacher attitude for teaching
3. Safe and nourished environments for the learners especially for the girls
4. Arrangement of proper incentives for learning
5. Sufficient Flexibility and autonomy
Contextual elements:
Educational commitments:
1. National goals and standard measures fort eh quality education
2. Guidelines for the curriculum
3. Major sources of funding and allocation of budgets
4. Teacher recruitment policies
What kind of the outcomes are expected from a quality oriented system of education?
Achievement standards for qualitative schooling
Cognitive development of the learners
1. Literacy, numeracy and mathematical skills
2. Attitudinal changes for the education
3. Good citizenships
4. Healthy, long and standard life
5. Proper use of the skills
Attainments of the learners
1. Formal completion of the education
2. Success rate of education
3. Awarding of the diplomas, degrees and certificates for the utilization of learned what already
Standards achieved after qualitative education
1. Achievement of the learning outcomes
2. Achievement of the standards of the education
3. Overall progress of the various sectors in country
4. Proper utilization of the capacities and capabilities
Management of educational affairs:
1. Education system management through out the country
2. Participation, progression, commitments, transition and complementation
3. Policy formulation and sharing of the states in the policy formulation
4. Engagement and use of times for the governances

Source: *Derived from Heneveld and Graig (1995), OECD/INES (2001), Scheerens (2002)*

In the lives of the individuals most of the problems, especially, occupational in nature are the result of misinterpretation of the involved sentiments, feelings and emotions of the concenered individuals, group, society and nation. A teacher has to face innumerable challenges and play different roles in his/her institution. He/she not only plan lesson but also organize activities, maintain necessary records, make to purchases, administer timetable, oral and aural teaching aids, and adopt new techniques communication and motivate them by word and deeds. Thus teacher is expected to process a multifaceted personality, under these circumstances, it is but natured the teacher will remain under stress which is sure to affect their effectiveness while Teaching.

Now a days due to LPG life has becomes very rigorous and everyone is feeling a lit of pressure due to which stress has evolved as a problem in every field of life. Stress is abnormal reaction that the organism displays against threaten environmental elements (Luthans 1994). Stress which is general term used for pressure that people are exposed to in life (Jepson and Forrest, 2006) May be defined as the individual harmony effort that the person display s against a stimulant which has excessive psychological and physical pressure on the person & griffin 1990. When a person feels insufficient in dealing with demands and challenge faced in life, she /he experience stress. Being harmed by this situation or taking advantage it mainly depends on the person because stress may either be a factor threatening the organism physically or psychologically or a power which gives energy in dealing with life (belter 2002). Source of stress may be classified as individual and organizational and outside of organization or it is possible to divides them into two groups as individual and organizational components : organizational tress which is also called professional stress is the

interaction between working conditions and the working person in environments in which the work demand exceeds the skills of the worker.

The factors may be monotony, change of technology , excessive workload, job security, ergonomic , management problems ,the hindrance of the drive of success, personal ambitions, the lack of harmony between person role and individual characteristics.

Occupational stress is stress involving work. Occupational stress can occur when there is a discrepancy between the demands. The environment/workplace and an individual's ability to carry out and complete these demands.

There are total 5 categories associated with occupational stress—

1. Factors unique to the job.
2. Role in the organization.
3. Career development.
4. Organizational structure climate.

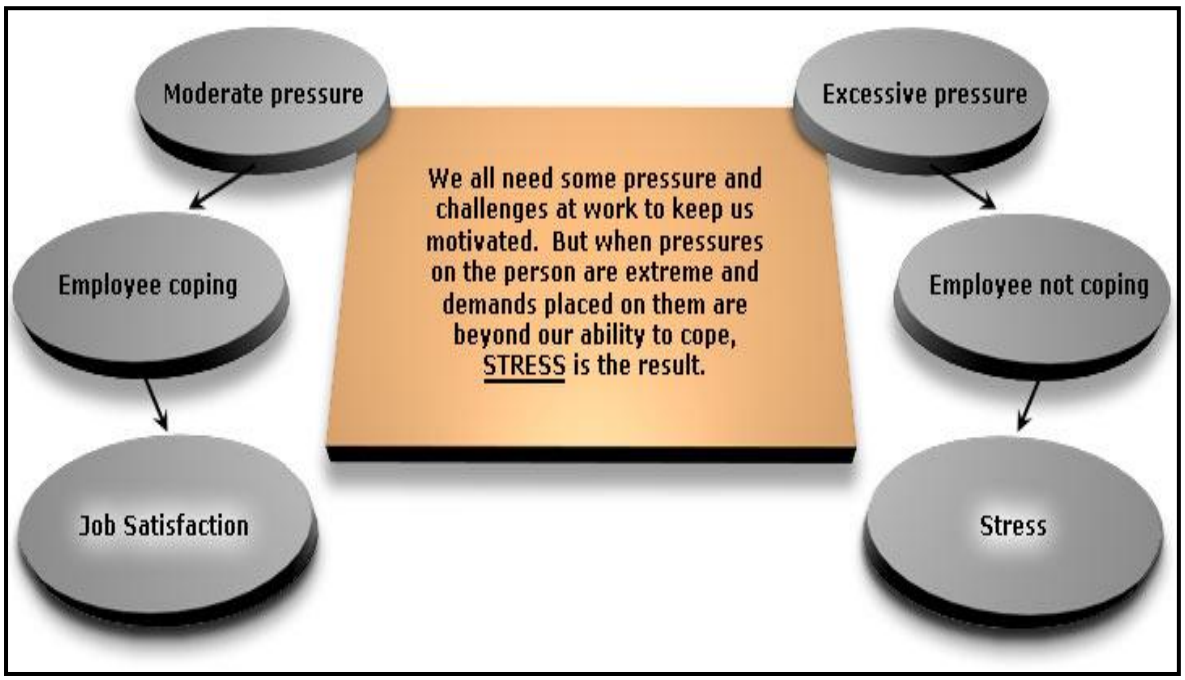

Moderate pressure
Excessive pressure
We all need some pressure and challenges at work to keep us motivated. But when pressures on the person are extreme and demands placed on them are beyond our ability to cope, STRESS is the result.
Employee coping
Employee not coping
Job Satisfaction
Stress

Figure : 2 *Model of Stress*

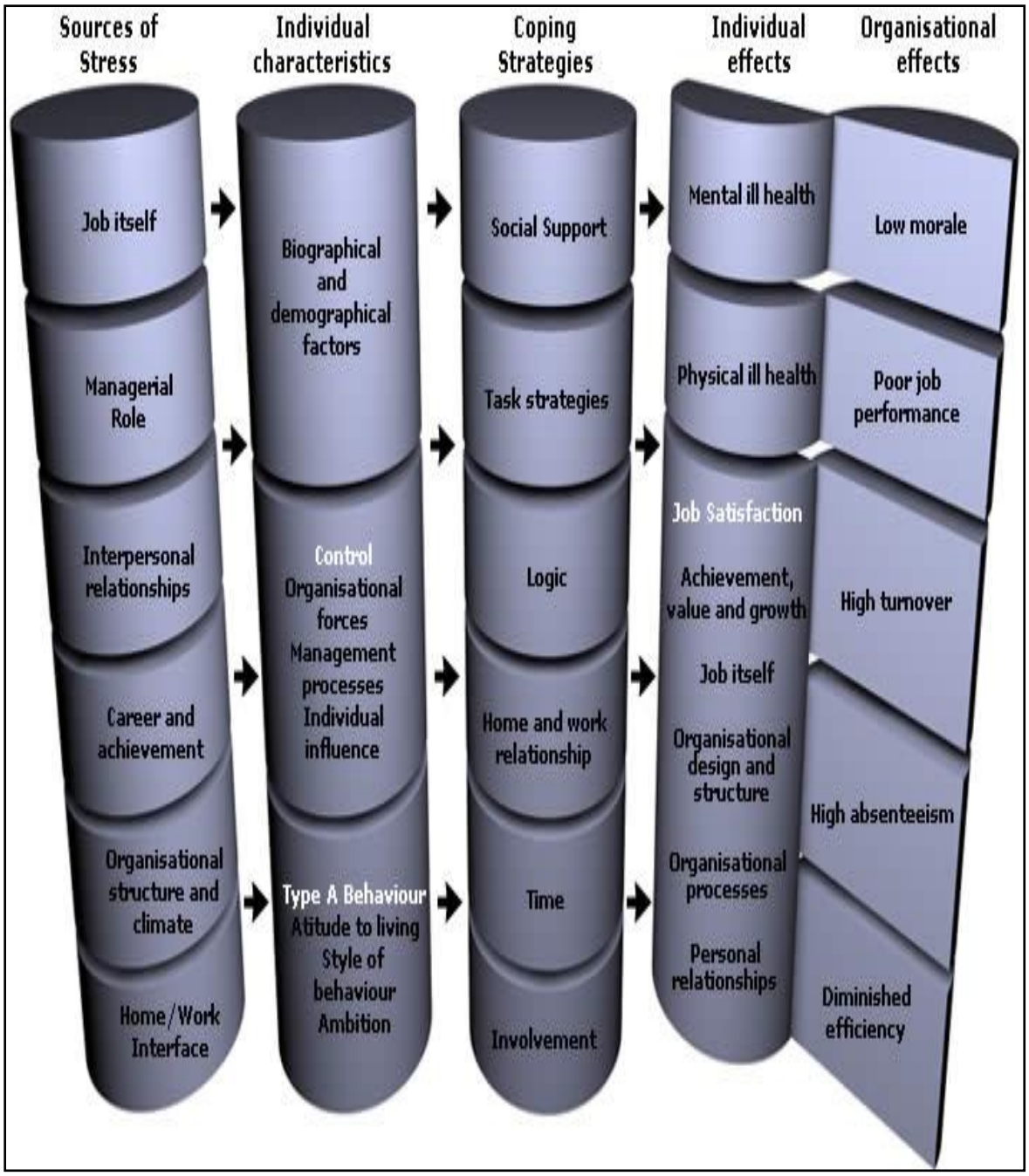


Figure : 3 *The model of stress which underlies the design of the indicator*

Above models of stress are describing various factors by which a person feels stress and when there is a lot of pressure regarding work on the person then stress is produced. One can cope it with the help of many factors like biographical, social, home and relationships which leads to the job satisfaction.

2. EMERGENCE AND JUSTIFIATION OF THE STUDY

To short out the problems related to stress and make effective teaching to ensure perfect quality the teachers and administrators must think about these two questions:

"Are we doing the right things?"

"Are we doing things right."

In the field of teacher education there is a need to have a clear and coherent idea of what are the "right things" that we are doing, and procedures for checking that we are "doing things right?"

In the last two decades, policymakers, teacher education institutions had implemented numerous initiatives in teacher education and development with aims to improve teacher performance. Although a lot of efforts have been made in this aspect, people if not disappointed, still doubt very much whether the competence and performance of teachers can meet the challenges and needs in the new century. They begin to aware of the limitations of traditional paradigm and efforts on improving teacher performance and Educational Quality in institutions. Within the constraints of time framework and resources, it is unrealistic to expect teachers to be prepared totally effective in terms of performance in the affective, cognitive and behavioral dimensions through pre-service and in-service training. But from the new conception of teacher effectiveness we can identify missing areas and linkages in our existing framework.

Durlabhji and Fusilier (2004) states that customer empowerment in education requires greater input from students as well as from business community that will eventually employ them and this in term will

streamline education and eliminate any vestiges of the esoteric academic "ivory tower" that exist in business school coursework.

Rutter et al. (2002) found that high self expectation, securing financial support for research, insufficient development in the field, inadequate salary, manuscript preparation, role overload, conflicting job demands, slow progress on career advancement, frequent interruptions and long meetings are the causes of stress among academic staff. Larchick and Chance (2004) at a personal level, teaching related stress can affect a teacher's health, well-being, and performance. Gilbert, Victoria (2005) The study used focus groups method to explore the nature of the relations between teacher efficacy and perceived autonomy in 4 types of urban middle schools-private, parochial, chartered public and regular public. Qualitative data analysis used Strauss and Corbin's method to analyze teachers groups discussions of factors that contribute to their personal teaching efficacy paying special attention to perceived autonomy. Michael et al. (2007) recommended that top leadership is the key to any TQM programme and the driving force behind success and failure. The TQM programme must be sold and not host to the employees. Iven (2008) stated that government initiatives are being pushed by a "narrow, employer-driven strategy". Policy makers do have an obligation to set policy, establish standards and monitor performance.

Roffe (2009) consider that due to open competition students are becoming more customers as well as consumers and expected to pay a going share of the cost of education.

Shukla, S. (2002) attempted to study the personality as a factor of teacher's effectiveness. Objective of this study, to find out the difference in personality factor of effective or ineffective teachers from one administrative type of school to another. 16 PF questionnaire by S.D.

Kapoor, teacher teacher effectiveness scale by Dr. Kumar and Mutha. 250 teachers were taken as sample personality factors of effective as ineffective. The findings of study were teacher differ significantly from one administrative type of school to another. Dutta, V. (2003) attempted to study the teacher effectiveness and ascendance submission. The purpose of the study was to find out relationship between teacher effectiveness and ascendance submission difference that possibly exists in teacher effectiveness and ascendance submission in males and females. Data was collected from 300 B.Ed. trainees (150 males and 150 female) of Lucknow city (U.P.). A self developed Teacher effectiveness scale and an Ascendance submission Reaction scale for Hindi speaking population (Dutta, 1982). The findings of study were that there is no correlation between effectiveness and ascendance of male teachers. Sangeeta et al. (2009) considers education system as a transformation process comprising of Input, Process and Output. Kumar (2009) suggest four principals of TQM in higher education (1) Supplier customer relationship, (2) Continuous improvement and self evaluation, (3) Recognition of organizations, (4) Leadership. Kumar et al. (2009) identified a list of obstacles, barriers, reasons and pit falls that institutes reporting during implementing TQM approach.

We do not know what future has but we can make our best efforts to make it a precious gift for our upcoming generation and in the same line of discussion this research work is an effort to achieve our intellectual future.

In the present era of globalization the area of education has increased on a large scale. By the involvement of different dimensions of education with a bonding with technology, the educationalist are trying to maintain TQM. To ensure TQM specially in higher education the teacher

and administrative personnel are feeling a lot of pressure, due to which teaching of teachers is also affected. Researcher has tried by different sources to know about the reality of high education institutes, and found that commercialization of education has lead the establishment of education institutes on a large scale, without consideration of TQM norms. Most of the teacher education institutes are running by businessman and capitalists, who have no knowledge of education field, they are only moneymakers. On the name of appointments and recognition a very rough game is in practice. There is no enough infrastructure but they are getting every type of course there. It raises a big question for there quality excellence. In august UGC has publically published a list of fake universities which are running and providing degree to the students, most of them are in U.P. the example of accreditation on the same building by changing the name plate only have also seen in the recent years. That is why researcher thought that are these institutions providing quality education to the students? Are they fulfilling the norms of N.C.T.E. and NAAC. Are the teachers of these institutions are doing their teaching in a effective manner with full devotion in the availability of limited resources and money? It is also seen that when the result is declared in the institutions the students get a very good percent of marks in practical comparison to that of theory papers. So possibility of using unfair means cannot be discarded. Proposals of money to the examiners or threat to the students are also in use. Owners want a maximum profit in minimum investment so the teachers also feel extra stress over them.

Thinking over all these thoughts the idea came in the researcher's mind to do a work on this particular problem related with TQM.

Researcher want to investigate such facts which are a hindrance in establishing TQM.

3. STATEMENT OF THE PROBLEM

The present study has been entitled as ***A STUDY OF TEACHER EFFECTIVENESS, OCCUPATIONAL STRESS, IN RELATION TO TOTAL QUALITY MANAGEMENT.***

4. DEFINITIONS OF THE TERMS USED IN THE TITLE

4.1 Teacher Effectiveness

Ryan (1969) "Teacher effectiveness is the capacity of a teacher to bring about a great change in his/her students. An effective teacher may be understood as one who helps development of basic skills, understanding, proper work habits, desirable attitude, value judgment and adequate personal adjustment of the students."

4.2 Occupational Stress

Physical or psychological disorder associated with an occupational environment and manifested in symptoms such as extreme anxiety, or tension, or cramps, headaches or digestion problems.

4.3 Total quality management

Deming (1986) Quality as "A predictable degree of uniformity and dependability at low cost and suited to the market."

The process of integration of all activities, functions and processes within an organization in order to achieve continuous improvement in cost, quality, function and delivery goods and services for customer satisfaction.

5. OPERATIONAL DEFINITIONS OF THE TERMS USED IN THE TITLE

5.1 Teacher effectiveness

For the present study, the teacher effectiveness has been operationally defined as an effective teacher who has clear concept of the subject matter , ability to write clear objectives for his/her course , ability to organize learning materials ,ability to communicate his/her knowledge to the students successfully ,and to deal with class room situations

5.2 Occupational Stress

For the present study Occupational Stress has been defined as the pressure and workload experienced by the teaching and administrative staff of teacher education institutes.

5.3 Total Quality Management

For the present study TQM has been defined as the application of quality principles to overall process and all the management functions in order to ensure total customer satisfaction.

6. OBJECTIVES

The present study is limited to achieve the following objectives:

1. To study the teacher effectiveness in relation to sex.
2. To study the occupational stress in relation to sex.
3. To study the Total Quality Management in teacher education institutes.
4. To study the relationship between teacher effectiveness and Total Quality Management.

5. To study the relationship between occupational stress and Total Quality Management.
6. To study the relationship between teacher effectiveness and occupational stress.
7. To study the relationship among teacher effectiveness, occupational stress and Total Quality Management in teacher education institutes.

7. HYPOTHESES

The following hypotheses are proposed to achieve the set objectives:

1. There is no significant difference between male and female teachers on the scores of teacher effectiveness.
2. There is no significant difference between male and female teachers on the scores of occupational stress.
3. There is no significant difference among male and female teachers in the level of perception regarding Total Quality Management
4. There is no significant difference in teacher effectiveness and occupational stress between teachers.
5. There is no interaction between teacher effectiveness and occupational stress in relation to Total Quality Management in teacher education institutes.

8. DELIMITATION OF THE STUDY

1. The present study will be delimited up to the Agra and Firozabad district only.

2. Teacher education institutes affiliated to Dr.B.R.A. University, Agra and recognized by N.C.T.E. only taken into account for the study.
3. Teacher education institutes having at least B.Ed course will be taken in this study.

9. VARIABLES OF THE STUDY

9.1 Dependent Variables-

- Teacher effectiveness
- Occupational stress

9.2 Independent Variables-

- Total Quality Management.

10. METHODOLOGY

10.1 Sample Design

Sample Unit	Teacher Educators, Pupil Teachers, Parents, Administrating and Supporting Staff.
Sample Size	1. Teacher Education Institutes : 20 2. Teacher Educators : 160 (20 x 8) 3. Pupil Teachers : 600 (20 x 30) 4. Parents : 200 (20 x 10) 5. Administrating and Supporting Staff. : 60 (20 x 3)
Sample Method	Stratified Random Sampling.
Sample Extent	Agra and Firozabad districts.

10.2 Tools of the Study

The following tools will be used for conducting the present study:

1. Teacher Effectiveness Scale [TES] by Dr. Pramod Kumar and Dr. D.N. Mutha (1983).
2. Occupational stress index [OSI] by Dr. A.K. Srivastava and Dr. A.P. Singh (1989).
3. Total Quality Management questionnaire for the teacher education institutes –self construct.

11. METHOD OF THE STUDY

Descriptive survey method will be used in the present study.

12. STATISTICAL TECHNIQUES EMPLOYED

The following statistical techniques will be employed to test the hypotheses of the study:

Descriptive statistics (Mean, Standard Deviation) and inferential statistics ('t' test) and graphical representation of data will be used to understand the nature of the data.

13. IMPORTANCE OF THE STUDY

Defining quality in education is a massive challenge since it deals with the most sensitive creation on earth –the human being. Industrial products are finished goods- take them or leave them. Nothing can be done once they are finished. Service is here and now. You can look for better quality only next time. Education has no such finished product, nor even the graduates. They are on the way "to be". Education only charges the human propensities to evolve and unfold it till the last breath, a process that covers the human journey from 'womb to tomb'. Human

beings continue to learn, and evolve , 'to be' (Mukhopadhyay 2006).Education is goal-oriented.

Accordingly, quality of education has been seen with reference to excellence in education, value addition in education (Feigenbaum 1983), fitness of educational outcome and experience for use (Juran and Gryna 1988), conformance of education output to planed goals, specifications and requirements (Crosby 1979), defect avoidance in education process (Crosby 1979) and meeting or exceeding customer's expectation of education (Parasuraman et al. 1985). Holt (2000) argues, 'I shall suppose that education is concerned with the development that of minds of the pupils; school produce educated persons who, by virtue of their schooling, to be construe? Commitment to quality makes student proud to learn and work hardly for improvement. Quality improvement is a never ending process. Education quality leads to a prospective future. Hence, insight on quality indices and virtual implementation need to be given top priority and due attention should be paid to the category in the wide range of educational strata e.g. school, university, educational management, and the staff.

If all educational bodies try to maintain their quality, in this process there is a possibility that the people working there has to do some extra work. In this context it is an important question of research that how can they work effectively?

Teaching is a complex professional activity whose effectiveness can be helped or hindered by a host of factors, including physical environment, policies on the curriculum and pupil assessment, quality assurance and accountability systems, institutional leadership. Today a teacher is seen as a facilitator allowing for idea generation. By animating, leading and counseling, the teacher is a mentor. Guiding, evaluating and

collaborating puts the teacher in the role of an information provider. The role of teacher is as a researcher and a learning resource developer cannot be undermined in this age. As a curriculum planner and organizer, a teacher plays an active role in the actualizing of the curriculum. These roles are closely related to one another.

To perform these role in effective manner a teacher may feel lot of extra workload load or stress. Specially, when there is a question of excellence of quality. Therefore the present study will be useful to understand and find out the factors influencing teacher effectiveness and stress. The findings of the study will be helpful for policy makers and administrators to create a healthy environment in organizations. This study will show the perceptions of the teacher educators, pupil teachers, parents, administrative and supporting staff towards the TQM, which will help to improve the quality of these teacher education institutes. TQM is the need of today's era and this study will definitely give remarkable findings which will be proved greatly useful for teacher education institutions. This study will also useful for NCTE, for the following reasons, in this study, in the form of institutional data the standards established by the NCTE will be tested. Either teacher education institutions are following these standards or not will be answered by this study. This study is directly related to establishing quality in teacher education institutes which is the aim of NCTE.

BIBILIOGRAPHY

Anand, S.P. (1983). "Teacher effectiveness in school journal of Indian Education, Any Lewchi.

Anjaneyulu, S.R. (1968). "A Study of Job-Satisfaction in Secondary School Teachers and Its Impact on the Education of Pupils With Special Reference to the State of Andhra Pradesh", *Second Survey of Research in Education*. CASE Baroda, p.482.

Anthony, M. V. (1979). "A study relating the effect of learning theory to the evaluation of the Teacher Effectiveness." Doctoral Dissertation. *Dissertation Abstract International,* 40: 5826-A, No. 11.

Atrey, Jai Shanker (1989). "A study of teacher's value and Job satisfaction in relation to their teaching effectiveness at degree college level." Ph.D. (Edu.) Agra Univ.

Best, J.W & Kahn James V. (2006). Research Methods in Education, Pearson-Prantice Hall, New Delhi.

Besterfield D.H., Besterfield-Michna; C.Besterfield G.H. and Besterfield M. (2003). Total Quality Management, Prentice-Hall Englewood Cliffs, N.J.

Bryman A. (2000), "Effective leadership and Management in higher education, A literature review", Studies in Higher Education. Vol 32, Pp. 693-710.

Chayya, M.P. (2001). "Effective teacher-Effective strategies of teaching" New Delhi, Alpha publicatiosns.

Cords, C. F. (1982). "Teaching effectiveness ; an analysis of faculty opinion and student ratings." Doctoral Dissertation, Claremont graduate school, *Dissertation Abstract International,83*: 986-A, No. 4

David, J. Hides, M.T. and Carey, S. (2001). "Leadership in higher education, Total Quality Management", Vol. 12, Pp. 1025-30.

Debnath, H. N. (1971). "Teaching efficiency and its measurement and some determinants." Doctoral Dissertation, Edu. Viswa Bharti Univ., *First Survey of research in Education* by M. B. Buch, p.426.

Durlabhji, S.G. and M.R. Fusilier (2004). The empowered classroom: Applying TQM to college Assessing Quality, 84-94. Institute of Higher Education, University of Georgia, Athens.

Dutta, V. (2003). Teacher effectiveness and Ascendance submission. Indian journal of educational research. Vol-22 (2). P-14.

Feigenbaum, A.V. (1983). Total quality control, McGraw Hill, New York.

Fullan, M. (2008). Change forces, Falmer, London.

Garrett, H.E. and Woodworth, R.S. (1981). Statistics in psychology and education, Vakils, Feffer and Simons Ltd, Bombay.

Good, Carter, V. (Ed.) (1979). *Dictionary of Education.* McGraw Hill Book Co. Inc. New York.

Grisson. (1992). The relationship of teacher effectiveness and selected teacher derrograph his variable to student outcomes. Dissertation Abstract International. A himanistios and social sciences. Vol-52(9). P-1033.

Growth, J.C. (1995). "Total Quality Management : Perspectives for leaders", The TQM Magazine, Vol. 7, Pp. 54-59.

Gupta. (1986). Prediction of teacher effectiveness through personality test. Buch's second survey of research in education. Ed.- 11. P-402.

Harris, W. (1960). *Encyclopedia of Educational Research.* The McMillan Company New York.

Herman, U. G. (1970). "The relationship of Teacher effectiveness to perception of self and teaching purposes." Doctoral Dissertation, Univ. of Florida, *Dissertation Abstract International, 31*: 5862-A, No.11.

Hyre, James G. (1975). "The relationship between teacher self concept and teacher effectiveness." Doctoral Dissertation, The Univ. of Akron, *Dissertation Abstract International, 36*: 1211-A, No.3.

Juran, J.M. & Gryna, F.M. (1980). "Quality planning and analysis" McGraw-Hill, New York.

Kaufman, R. (1992). "The challenge of total quality management in education". International Journal of Education Reform 1,2.

Koul, Lokesh (2006). "Methodology of educational research", Vikas Publishing House, New Delhi.

Kutty, S. (2000). "Managing stress: anticipate, Apprehand, Assess & Plan well to get rid of stress". Head start, The Indian Express, 01, Issue 24.

Mukhopadahyay, M. (2006). "Total quality management in education". Sage, New Delhi.

NCTE proposed draft of curriculum framework on teacher education.

OECD/INES (2001). "Education at a Glance, Paris, OECD Scheerens, J. (2000). "Improving School Effectiveness". Fundamentals in Educational Planning, No. 08, Paris. UNESCO-HEP.

Sangeeta, et al. (2009). "Conceptualising total quality management in higher education". The TQM Magazine, 16 (2).

Shukla, S. (2002). Personality as a factor of teaching effectiveness. Indian journal of educational research. Vol. 21 (1). Pp. 11-15.

Singh, U.P. (2005). "Managing examination stress to attain success" Journal of community guidance & Research, 22 (3), 276-291.

Soanes E. (2003). "Compact oxford reference dictionary" New York. Oxford university press. www.state.edu.

Susan, W.E. (1995). "Total quality : a mechanism for institutional change and curriculum reform in Roberts, H.V. (Ed.) Academic Initiatives in total quality for higher education, ASQC, Quality press, Milwaukee, WI.

Usha Kumar (2009) Reform in pedagogy through TQM. University news, Vol. 47, No. 13 March 30-April 05, 2009.

Viswanandhan, K.G. (2008). "Employability of graduates of a search through the educational processes" Indian engineering institutions : International Education Studies, Vol. 1.

Witcher, B.J. (2000). "Total Marketing: Total quality and Marketing Concept. Total Quarterly Review of Marketing Winter.

www.quality.visit.gov/education_criteria.stm